

SCIENCE-ART
AND
GLOBAL HUMAN SURVIVAL TECHNOLOGY

ROBERT POPE

A Speech delivered by Visiting Professor, Robert Pope,
at Yangzhou University, China, November 2001

A Science-Art Research Centre of Australia Incorporated Publication ©

November 2001

P.O. Box 733
Murwillumbah
NSW 2484
Australia

Ph (02) 66 795 442
email: pope@science-art.com.au

I.S.B.N. Number 0-9577784-1-4

Front Cover Artwork

Title: Entry into the Universal Hologram

Artist: Robert Pope

Medium: Acrylic on canvas

Size: 22ins x 40ins

Science-Art Research Centre Catalogue Registration: 43-04/0B

DEDICATION

This book is dedicated to the people of the Riverland of South Australia and the Region's newspapers The Murray Pioneer and The Loxton News.

For more than a quarter of a century the Riverlanders have supported the pioneering work of the Science-Art Research Centre of Australia. Their confidence enabled the artists, scientists and academics to hold true to the wondrous science-art vision bequeathed to us by the noble universities of ancient Greece. This generosity of spirit culminated in the *Science and Human Survival* address delivered at Cambridge University on the 8th of June, 2001.

As a result of this address scientists throughout the world working at the cutting edge of human survival technology are now seeking a multidisciplinary solution to the social, economic and environmental crises threatening us all.

Robert David Pope
February, 2002.

ARTIST TO THE TOWN OF BERRI, RIVERLAND OF SOUTH AUSTRALIA.

Professor of Science and Professor of Art.

Director of The Science-Art Research Centre of Australia

Director of the Division of Science and Art, The Institute for Basic Research, USA

Visiting Professor Action Learning University, USA.

Visiting Professor Yangzhou University, China.

**SCIENCE-ART AND
GLOBAL HUMAN SURVIVAL TECHNOLOGY**

A TALK BY VISITING PROFESSOR, ROBERT POPE,
DELIVERED AT YANGZHOU UNIVERSITY AND NANJING UNIVERSITY,
OCTOBER – NOVEMBER 2001

Throughout all of recorded history, Chinese invention and wisdom are well documented. It is a great honour to be invited to talk today at Yangzhou University and I sincerely thank Professor Chenyou Xu, Dean of the Department of Art, for making this possible.

The title of my talk is:

SCIENCE-ART AND GLOBAL HUMAN SURVIVAL TECHNOLOGY

There is a desire in Western culture to try, in some way, to enhance human values. There is also a growing realization that the technology that the West has helped to create is now systematically causing the destruction of human values and the degradation of the global environment.

China is seen by a growing number of people as gathering together its great life energies. There is a hope that an emergence of Chinese wisdom will occur to benefit the global human condition in the 21st Century. To be in China at this time and to be able to talk of such ideas is a profound philosophical experience.

During the 1970's I organized many workshops in Australia in which scientists and artists worked to develop a joint science-art philosophy and to create artworks together. In 1995 the Australian Government awarded my Science-Art Research Centre of Australia its present status as An Approved Research Institute.

Before I begin to talk about our science-art work, I would like to show you some pictures of the actual Centre itself. (*show slides*)

The design and the plans for the building, as well as its actual construction, was carried out by the artists of the Centre, myself, Robert Todonai and the artist Irene Kam Ying Brown. We took rocks from a nearby quarry in a car trailer to the building site, mixed up the concrete and mortar and completed it by ourselves. The huge timber beams were obtained from old disused bridges in the area. It took almost ten years to build the Centre, its gatehouse, gardens and scenic walkways and was paid for by the sale of the artist's paintings. Scientists from all over the world have visited the Centre, many of whom have contributed to the contents of my talk today. The indoor gardens and beautiful courtyards have proven themselves to be an ideal setting for creative thinking.

Several years ago one of Australia's most celebrated scientists, a former vice Chancellor of the University of Adelaide, the physics author, Professor Paul Davies, wrote that the greatest dishonour against science occurred when the Arts called it "dehumanizing". I wrote to him to explain that this charge against present science originated within Western science

itself during the time of its invention. A few years ago Professor Davies wrote a book about recent discoveries that suggested that a more romantic world view of science had come into existence. He wrote that although this was rather strange, it now may be nonetheless true. My talk is about the origins of this more romantic world view of science and its significance to global human survival. His latest publications show a unique ability to visualise technologies which are becoming increasingly obvious to a growing number of philosophers and scientists who are reasoning beyond the 20th Century worldview.

In Western culture, ethical human values are associated with a concept that links the living process with a religious belief to some an aspect of infinite universal reality. For example, each day that the Australian Federal Parliament meets, it is opened by a prayer, which honours this idea about an infinite living process. A growing breakdown of this human value belief system must automatically occur when politicians need to heed the advice of scientific and economic advisors. This is because the geometrical logic base that supports the prevailing scientific world view is completely incompatible with the living process.

The prevailing geometrical logic base upon which political leaders are obliged to act is quite capable of obtaining computer simulations of living bioforms. However when this logic is used to obtain simulations of the growth of these bioforms in spacetime, they become grotesquely deformed. The 20th Century worldview is all about their extinction and it is important to note that this applies also to the human species.

On the other hand, by using the logic associated with the Science-Art Centre's open universe, it is possible to obtain healthy bioform simulations projected many millions of years into the past and the future. Since the Centre published this internationally acclaimed new mathematics and physics, scientists around the world have developed new chemistry and physics which can be used to develop the global human survival technology.

The famous scientist, Sir Roger Penrose, has pointed out that Newtonian physics, Einsteinian physics and orthodox quantum mechanics are upheld by a geometrical logic that is incompatible with the living process. Not only is the 20th Century worldview devoid of any rigorous scientific human values, it also prevents any possible reasoning which attempts to link human values to any aspect of an infinite universal reality. This confusing cultural situation is the result of a decision made centuries ago, which completely separated the culture of science with the culture of art. Today, when you reunite the two cultures at a subatomic level, the resultant science-art logic immediately resolves the prevailing human value system paradox.

Western ethical human values did not originate from any superstitious religious belief system at all; they began as an integral part of science itself. This scientific process, which included Eastern wisdom, began to develop in the Golden Age of Athens in the 5th Century BC. Within a few hundred years it was extended into a ethical atomistic physics university course. At that time artistic reasoning was part of scientific thinking in an attempt to prevent human extinction. The ancient Greek thinkers had realised that unless we understood the functioning of an infinite universe we would pollute it with an unbalanced scientific culture and bring about our own extinction as is occurring at the present time.

In the 5th Century AD, as we shall see, this science-art research methodology was fused into the Western religion. However, in the following century the ethical Greek science disappeared from all Western thinking. The Roman Legal system was entirely rewritten to outlaw the teaching of all Greek science. Western culture was entering into that period of its history called the Dark Ages. When science reemerged from the Dark Ages, the culture of science was separated from the culture of art and the ethical atomic physics remained outside of mainstream scientific reasoning and research. Some famous early North American philosophers wrote that this separation would one day present the greatest possible threat to the American democracy, far greater than that posed by any possible external hostility.

Recent major scientific discoveries have been made which demonstrate that the living process is indeed associated with a very complex infinite universal energy system. This is now bringing about the collapse of the present world view and is also identifying the geometrical logic base upholding the lost ethical and humane physics value system. This scientific knowledge can now be used to construct a global human survival technology of unimaginable wealth, resources and human opportunity. The catalytic properties of art have been identified as the essential ingredient needed to provide the opportunity for this human survival technology to be developed.

Human survival can now be seen to depend upon a rather unusual problem. It is no longer possible to obtain a simple policy statement from Western Universities or governmental educational policy-making departments which will continue to endorse or deny the validity of the destructive physics logic base from which technology and global economic rationalism is derived. Requests for such a fundamental university educational policy statement results in inarticulate confusion. This is simply a reflection of the traumatic culture shock being caused by the collapse of the prevailing world view. Such a situation cannot contribute toward the betterment of the global human condition because it is unable to cope with the new human survival knowledge that is now accumulating throughout the world.

At Cambridge some of the scientists who helped compile the new A-Z Dictionary of Space published by *THE TIMES* in London in October 2001 helped me to draft a letter about this issue to the Australian Government's Department of Education. The new dictionary had included an open universe model of reality which makes it now scientifically acceptable to link the evolution of human values to a state of infinite reality. The reply confirmed that the Australian Government has no present policy on this issue. I am delighted to have spoken to Chinese University students who have welcomed any opportunity to work with Australian universities to help resolve this nightmare problem. I was proud to assure them that multicultural Australia, when it does come to terms with the collapse of the old worldview, will certainly appreciate their creative input, both in the arts and sciences. However, it is disconcerting that students are still using prescribed university scientific textbooks, which demand a total obedience to a now debatable fundamental logic base. No foreign student at an Australian university can appreciate being forced to conform to a totally destructive ethos that unintentionally prohibits any application of scientific reasoning about human values. Obviously the situation is now critical and must be resolved as quickly as is possible.

In order to begin to grasp the social significance of the collapsing world view we need to understand what that world view is about. The prevailing world view considers that the universe consists of a vast amount of hot things that are radiating heat out into cold space. Eventually, after billions of years, the entire universe must lose heat until it becomes the same temperature as cold space. At this point in time it is seen as becoming a frozen lifeless corpse. Within this world view all aspects of reality are considered to be caused by the flow of heat energy toward this ultimate universal heat death. With a few rare exceptions all prescribed Western university scientific and economic textbooks are based upon this logic of ultimate universal destruction. The universal heat death law is the overriding key physics law, which makes all applicable present scientific logic innately totally destructive. This science is upheld by a Euclidian logic, which, as I shall explain, is considered by distinguished science-art researchers to be the crumbling foundations of our doomed civilization. The book containing that statement, *The Beauty of Fractals – Images of Complex Dynamical Systems*, can be found within almost every Western university science lab library. It contains details of a multi million dollar fractal research program. The book contains human value statements that are similar to the published findings of the Science-Art Research Centre of Australia. However, with use of computer simulation scenarios it is possible to obtain new scientific proofs to show how to obtain solutions to this problem.

The serious nature of our obsession with the universal heat death logic is only now becoming apparent. Scientists previously thought that the universal heat death logic was not harmful because the event was billions of years into the future. The problem, however, is that science tends to accelerate the function of whatever it is focused upon. Processes of destruction and extinction, which would have once taken millions of years to occur on the planet earth, are now accelerated to take place within our lifetimes. The technological knowledge that we are rapidly developing at present cannot provide solutions to such problems because it is simply a logical expression of the scientific ethos that is accelerating humanity to extinction.

We are learning more and more to think in terms of destruction. For example, an atomic nuclear bomb is a child's toy in comparison to ideas about making an invisible black hole by imploding an atom in a certain way. Once such a thing was created then a volcano or earthquake could free it from its magnetic holding restrictions. Once this happened it would begin the unstoppable process of swallowing up the entire solar system. We could not send it away into outer space in case it fell into the sun and began to swallow that. The reason why I mention such a nightmare is to attempt to suggest to the imagination the incredible magnitude of wealth, resources and opportunity that would be available from an opposite mirror image creative physics technology. We need to realize that it is very difficult to explain about such a creative technology when the prevailing worldview prohibits any reasoning on this matter. We have the strange situation now that scientists, when forced to examine rigorous human survival Creative Physics data are actually classifying it as '*while not factually erroneous it must remain inconceivable*'. Later I shall attempt to explain about the nature of the human survival technology that the collapse of the prevailing world view is showing to be feasible.

We have a science and technological culture controlled by an overriding law of universal

destruction that insists that the universe must become a frozen lifeless corpse. This prevents us searching for a human survival technology because such a technology links life to an aspect of infinite universal reality. Quite obviously both ideas cannot exist together. The unfortunate problem is that, even as reliable scientific human survival evidence accumulates it cannot be even considered within the prevailing world view. It is therefore now necessary to talk about the collapse of this world view so that the human survival technology can begin to be envisaged.

The collapse of the prevailing world view began in 1980 with the discovery of fractal geometrical logic which links the living process to infinity and not ultimate total destruction at all. This discovery was made world famous by the science-author, Arthur C Clarke, in his television documentary entitled *FRACTALS: THE COLOURS OF INFINITY*. He referred to the discovery as the most important mathematical discovery in the history of humankind, one that will affect the destiny of humanity for thousands of years to come. This program was linked to the findings recorded in the Science-Art book I have already mentioned, *The Beauty of Fractals – Images of Complex Dynamical Systems*.

During the 1980's my Science-Art Research Centre used the discovery of fractal logic to develop life energy mathematics. Several of these papers were published by Italy's leading scientific journal. In 1981 two of these papers were selected from the world literature for reprinting in Washington as being among some of the most important scientific works of the 20th Century. Today they reside alongside papers written by such authors as Louis Pasteur and Sir Francis Crick. The work has been extended by scientists in America into a new chemistry and in Europe into a further extension of my Centre's Creative Physics

In 1994 the Centre's work was extended by the Institute for Basic Research in America, as "An New Important Physics". In 1995 the second edition of this book won an important physics first prize at an international conference of science held in Europe. It was internationally acclaimed for the discovery of new physics laws governing *optimum* human growth and development. This work demonstrated that the universe is a multidimensional reality and that the prevailing world view is now obsolete. The Institute for Basic Research has developed a new important hadronic chemistry which outlines the processes to obtain new, efficient, clean fuels to replace ecologically harmful fossil fuels.

The January 1999 issue of SCIENTIFIC AMERICAN was about the greatest scientific discovery of 1998, judged as such with a physics first prize by the journal, *THE SCIENCES*. The front cover of SCIENTIFIC AMERICAN carried the headline message that "the old world view is smashed". An article published later in the prestigious journal, *NATURE*, about this discovery, estimated that it would now take philosophers ten to fifteen years to construct an appropriate new model of reality. I am pleased to be able to explain today, that my Science-Art Research Centre has been carefully constructing such a model for over twenty years.

A few months ago the journal, *NEW SCIENTIST*, published a paper by a physicist at Oxford University. It provided evidence to prove the existence of a multidimensional

universe, which refuted the prevailing worldview and endorsed the Science-Art Centre's model of reality. In the meantime there are scientific papers being published by accepted scientific journals which refute the idea that the present world view is collapsing at all. Because of all this growing confusion, it is, as I have already stated, impossible to obtain a formal policy statement from Western universities or Western governmental educational policy makers on this issue. They simply are no longer able to support or deny the validity of the concept that the law of universal heat death must control all technological, economic and social science development.

The culture shock associated with this collapse is enormous. As is normal in such cases of severe culture shock trauma, the initial reaction is generally one of complete denial. However, because the issue embraces fundamental human ethical values, then sooner or later it must enter the international legal system on behalf of global human survival. Already the United Nations University Millennium Project, South Pacific Node, American Council, has fully endorsed the concept of using Creative Physics fractal logic for the cause of global world peace and such an awareness is growing via the internet..

Because WESTERN SCIENCE BEGAN IN ANCIENT GREECE it becomes reasonable to reexamine its origins in order to try and resolve the present scientific confusion. During the Golden Age of Athens, reality was considered to have been caused by an infinite whirling force called the '*nous*'. This nous force was considered to have acted upon primordial particles in space to construct the physical worlds and also to evolve intelligence and wisdom. It is possible to associate this physics idea with more ancient fragments of Eastern wisdom, which were used by the Greeks to develop atomistic theories of life as well as theories about the atomic properties of non-living matter. It is also possible to assume that some relevant understanding existed about the special nature of light reflected from the moon and stars. Such polarised light has the ability to turn living atoms of carbon in one direction and non-living atoms of carbon in the opposite direction.

For some two hundred years the greatest of the Greek scholars attempted to fuse ethics into the nous force. This was done in the attempt to establish a science to explain such human values as love, beauty, compassion, justice, wisdom and a form of ennobling government. From this work an Athenian University taught an atomic physics science for ethical ends. Atomistic physics values for life were considered more important than the atomic physics properties of the physical atom and such knowledge influenced the development of Christian and Islamic culture.

The science-art research methodology, in which science was not separated from art, is referred to as the Platonic tradition of Greek Philosophy. From within that world view the human response to music and beautiful art forms in nature became the cornerstone of Western science. This is known today as the process called 'Wisdom Through Beauty'. It is based upon the idea that the nature of all things, the spiritual, as well the mechanical, can be understood by using the logic of geometry and geometrical ratios.

The Greeks had discovered that musical harmonics and beautiful art forms found in nature included within their construction the use of such geometrical ratios as pi and phi. Today,

when we try and divide these ratios out by using a computer, the resultant decimal points extend on into infinity. The Greeks had another way of grasping such knowledge and they called such ratios ‘unutterable figures’, which originated from an infinite aspect of universal reality.

The Greek scholars also knew that the forces of vibrational musical resonance could act over a distance. They reasoned that the harmonic vibrations of certain atoms could transfer an artistic wisdom into evolving human consciousness from this infinite aspect of universal reality. This aspect of the workings of the nous, being part of the evolution of the universe and was seen as existing for the *good* of the total universal environment.

The Greeks knew that living species could become extinct, as if they would be discarded by the universal environment because they did not exist for its ultimate *good*. Therefore, in order to avoid extinction, it became necessary for humans to develop ethical knowledge and wisdom for the *good* of the infinite, or immortal universal environment. This concept was translated into the Western religious idea of using ethical wisdom to protect the continuity of an immortal soul.

As present science is expanding to dominate all human endeavour so the religious ethical human values can only appear to be more and more illogical. Part of the culture shock associated with the collapse of the present scientific world view is the need to come to terms with the new evidence that returns a human value system back again to science. As computer simulation survival scenarios eventuate to prove the existence of a new beneficial reality, this transition will be accepted. It will soon be seen as the only pragmatic alternative to the increasing chaos of destruction that our science and technology is causing.

Chinese scholars can appreciate the general idea of a balanced science representing the ‘*good*’ of the ancient harmonic atomic movement physics with the ancient ‘*evil*’ of material atomic physics, in order to maintain the health of the total environment. In 3rd Century BC Greece it was taught, that if we did not maintain such a balance and became obsessed with materialistic atomic physics then the ‘*evil*’ within the atom would destroy civilization. In the 3rd Century AD, the Roman historian, Plotinus, translated this ‘*evil*’ as unformed matter. In our age of atomic bombs and the radioactive poisoning of our global environment, these ancient warnings need to be heeded by all of us. We need to resolve to develop a Creative Physics human survival technology as soon as is possible.

Very few scientists today realize that Sir Isaac Newton endorsed, as a more profound philosophy, the fundamental physics principles of the Greek ethical science in order to balance the mechanical description of the universe. This was discovered within Newton’s unpublished Alchemy writings and written about in 1989 by the prestigious journal, *NATURE*. The fact that it is possible to link those physics principles with an infinite living process means the collapse of the prevailing world view, no matter the great global culture shock it might cause. At Cambridge University scientists working at investigating this more profound philosophy in order to locate new technologies were shocked and upset to learn that it linked to the technology of Newton’s great contemporary, Immanuel Kant. Kantian technology has for many years been dismissed as impractical, due to its contradiction of the

20th Century worldview

The idea that an ancient Greek ethical atomic science of atomic movement provided the origins of western religious thought is explained in this extract of Encyclopedia Britannica.

(show slide of the encyclopedia's entry for Augustine, St)

This explains that in the 15th Century Ad, the greatest mind of Christian antiquity, St Augustine, fused the religion of the New Testament with the platonic traditions of Greek philosophy. In the following century the Roman Emperor, Justinian I, became enraged because Eastern wisdom had been incorporated into the idea about the immortal soul. He made it a crime punishable by death to teach Greek science, which he considered heathen and barbaric.

It is important for us to realize that Justinian I completely rewrote the Roman Legal system to ensure that particle movement theories would never be again linked to ethical human evolution. This is important because many of the Western nations inherited the Roman legal system and their computer data banks still contain confusing translations of particle physics philosophy from the Greek and Latin original writings. The ban upon ethical particle movement physics explains why the Roman Church persecuted such scientists as Copernicus and Galileo for teaching such ideas that the earth revolved around the sun.

One of the founding fathers of modern civilization, Giordano Bruno, taught at Oxford University about ethical evolution being made possible by the movement of many solar systems within an infinite universe. Upon return to Rome, he was imprisoned for seven years, tortured, and in 1600 the Roman Christian Church burned him alive. These persecutions help explain why Sir Isaac Newton did not publish his more profound philosophy which alludes to the Greek ethical atomic theories and which was discovered within his alchemy writings in recent times.

The 15th Century Italian Renaissance refers to the rebirth of the lost ancient Greek science-art culture. The powerful Medici scholars of Florence who worked to roll back the religious superstition that has prevailed in Italy for a thousand years instigated this renaissance. They attempted to do this in defiance of the Roman law, which prescribed the death penalty for teaching about particle movement generating divine wisdom. The Islamic Sultan, Mehmed II, has given the Medici copies of outlawed Greek books of science. They used them to revive the old Platonic University teachings that St Augustine had fused into the Christian religion a thousand years earlier.

(show slide of Encyclopedia Britannica listing for Saint Augustine showing reproduction of his portrait by Botticelli)

If we look again at the painting of St Augustine by the famous Renaissance artist, Boticelli, which was commissioned by the Medici in 1480, we find a portrayal of the forbidden ethical science. The halo is shown about to place a spherical brass book stud into its orbit to portray atomic movement generating divine wisdom. Behind the Saint's head is a book

opened to display geometrical logic and around the figure are various instruments used to calculate orbital movement.

(show slide of painting of Saint Gerome by Ghirlandaio)

We know that the halo and book stand device was not simply a coincidence because the Medici commissioned the famous artist Ghirlandaio to repeat it in this painting which was also painted in Florence in 1480.

Battles were fought to destroy paintings such as these. The artists themselves became terrified of retaliation by the Church in Rome and burnt many of their own paintings. These two paintings by Botticelli and Ghirlandaio escaped that period which the history books refer to as 'The Burning'. The Science-Art Centre researched copies of the Italian Renaissance manuscripts in order to derive the formulae it used to test out the forbidden science through successful super-computer bioform simulations.

When the Greek teachers of science were exiled from the Roman Empire in the 6th Century, many fled into exile in Spain. As Arabian science developed from their work the Greek life geometry became the foundation of the Art of Islam. In Arthur C. Clarke's famous television documentary, *Fractals, Colours of Infinity*, Islamic art is related to the discovery of fractal logic in 1980. During a Science-Art exhibition in Central Sydney, Australia, in 1999, the Centre was pleased to learn that the Australian Islamic scholars considered that the linking of the Italian Renaissance with Sultan Mehmed II was an important multicultural event.

(show slide of extract from the Arab World News about the Centre's multicultural art exhibition)

This is an Islamic newspaper article that was published in Sydney. As Fractal logic technology develops it is hoped that the link between the Art of Islam and fractal logic will extend further scientific multicultural goodwill. Having examined the history of the lost ethical science I will explain the nature of its human survival technology and it will become apparent that the world now stands at the threshold of a most wonderful future.

During my Artist-in Residency in the University of Adelaide in 1978, my theories to modernize the lost Greek ethical science into Creative Physics were investigated by the Science Unit of Australian National Television. My ideas of an Open Universe were included into an 8 part international television series called "*The Scientists-Profiles of Discovery*". UNESCO appointed me as a special Science-Art Delegate to a World Summit Meeting of Science, held in the International Centre for Theoretical Physics in Trieste in the following year. The great Chinese scientist, Professor, Kun Huang, explained to me that the Greek life geometries could be found in the fossil record. He suggested that changes to these geometries over evolutionary time periods might validate my idea of a Creative Physics.

The following year the discovery of fractal logic was made and the Science-Art Centre

realized that the Greek life geometries were the precursor to the new fractal knowledge. Our mathematician searched the 15th Century Florentine writings of the Italian Renaissance for evidence that could expand the Greek life geometries into a fractal logic computer simulated scenario. He developed a harmonic formula to obtain the simulation of a living animal. By lowering the harmonic order by, say, a musical octave, the formula produced a computer simulation of the animal's twenty million year old fossil ancestor, which was confirmed by the Smithsonian Institute in America. A simulated futuristic blueprint of the species was obtained by raising the harmonic order, which showed evolutionary architectural advancement. Such healthy futuristic generations of life forms cannot be obtained by using the geometrical logic which upholds prevailing 20th Century worldview.

An even greater biological discovery then followed. By lowering the musical mathematical order in another way, the computer simulation of a world famous fossil was obtained. Scientists throughout the world for 98 years had been unable to classify this fossil. Our success meant that our life energy force-field mathematics had been proven to be truly scientific. This in turn meant that the original simplistic ancient Greek science-art research methodology was also scientific. As I have mentioned earlier this work became a new important physics, published in 1994, reprinted in 1995 and was acclaimed for *the discovery of new physics laws governing optimum human growth and development*.

The success of the Science-Art Centre's use of Professor Kun Huang's research methodology is important to the world. Kun Huang had warned his colleagues, Albert Einstein and the Nobel Laureates, Neils Bohr and Max Born, that the 20th Century worldview, unless altered, would come to destroy global civilisation. In China I was amazed to learn that his students, some now professors of science, recalled such a warning.

Leonardo da Vinci is one of the history's most famous artists. Among his teachers were Botticelli and Ghirlandaio, who, as we have seen, knew about the ethical Greek science. Leonardo is famous for his scientific designs and inventions that were well ahead of his time. They included such things as designs for flying machines, submarines and advanced weapons.

The Science-Art Centre realized that Leonardo had tried to fuse the ancient Greek ethical science with the mechanics of his day within his famous *THEORY OF KNOWLEDGE*. This theory was designed by Leonardo to provide the means of deducing an omni technology. I was able to modify his work to predicted the supra-technology as being a nano-technology of health. This was published in a book launched in Los Angeles in 1989 by the Hollywood Thalian mental Health Organisation. The book honoured the Great American Dream by updating the physics and geometrical principles upon which it was founded. Upon my return to Australia I was awarded the Dorothy Knox Fellowship for Distinguished Persons by the Dunmore Lang College at Macquarie University

A few years later the vast new science and technology that I had predicted was discovered. One of its famous discoverers, the Physics professor, Barry Ninham of the Australian National University, assessed our correction of Leonardo's work. He wrote that the Centre's work *"encompassed a revolution of thought as important to science and society as the*

Copernican and Newtonian scientific revolutions”. In order to grasp the magnitude of the technology and social significance of this we can refer to the greatest scientific minds of the 16th and 17th Century Age of Enlightenment, Emmanuel Kant and Sir Isaac Newton. We know from a very recent discovery that Sir Isaac Newton endorsed the fundamental physics principles upholding Emmanuel Kant’s spiritual technology. In order to maintain his professorship and avoid religious persecution, Kant was obliged to link his metaphysics theories to several prescribed religious books. Their dogmatic religious influence made it impossible to comprehend any practical application of his work and it was considered to be of no real value to mainstream scientific thinking of that time.

When Western universities met to establish a common base for the teaching of science, Emmanuel Kant’s work was moved into the realm of impractical scientific speculations, where it withered and died. The Universities decided that Sir Isaac Newton’s unbalanced model of reality would become the foundation stone of Western physics. In the following centuries, great American philosophers saw this lack of spiritual scientific research as one day creating the greatest possible threat to the American Democracy. Today, at Cambridge University, the discovery of Newton’s more profound philosophy is causing a severe culture shock when it is realised that it supports the Kantian supra-human survival technology.

In a paper titled *SCIENCE AND THE AMERICAN EXPERIMENT- HOW NEWTON, S LAWS SHAPED THE CONSTITUTION*, historian, Professor John Patrick Diggins, of the University of California, explains how the American civilization based its noble dream about global liberty upon Newtonian physics principles. He quotes the words of one of the founding fathers of the Constitution of the United States of America, “*Liberty is ensured not by civic virtue, but by the design of government itself, which, in turn, rests on the principles of physics and geometry*”. However these physics principles belonged to the unbalanced physics of Sir Isaac Newton, which in turn is supported by the logic of Euclidian geometry, which, as the great scientist Sir Roger Penrose has pointed out, is incompatible with the living process. As the physics book, *The Beauty of Fractals – Images of Complex Dynamical Systems explains*, the prevailing geometrical principles upon which our technological culture is based must be come balanced in order for civilisation to survive.

In the USA the greatest possible scientific mistake had unknowingly occurred. Emmanuel Kant’s obvious observation had been overlooked. Kant had written that unless the laws of physics used to guide human governance are about health, then they are meaningless. The Physics principles governing optimum human growth and development are now needed to honour the noble American Dream. The recently discovered logic of fractal geometrical principles is needed to balance the Euclidian principles, which the famous science-art scientists in American have referred to as the geometrical logic foundation of a doomed civilization. After the First World War, the American President, Woodrow Wilson, argued that the American Government should not be based upon lifeless Newtonian mechanics because the Government is a living thing. He wanted America and other world states to be guided by scientific life principles as well.

During the first half of the 20th Century the French Philosopher of Science, Teilhard de Chardin, helped to discover the Peking Man’s skull, which swung the focus of the origin of

mankind to China. He used his knowledge of fossil evolution to extend the science of the ancient Greek nous into an atomic physics theory about the evolution of human consciousness. His theory reasoned that successful evolution must include the entire global population and not any chosen race or privileged few. This was a different logic to the prevailing one, which considered global humanity to be an inferior product to some future genetic advancement.

Scientists use the genetic evolutionary theory to help find causes for terrible diseases. Adolph Hitler used a variation of it to start the destructive processes of World War II. The real problem, however, is that this way of thinking actually is preventing us from opening what Teilhard de Chardrin called “the golden gates to the super human future for all people all-together”. We have fallen into the same trap that Nazi Germany created for itself during the 20th Century. Because we have no scientific humane values we have become unwittingly convinced that the DNA is guiding evolution. This is incorrect, because, as I shall explain, the evolving protein guides evolution in consultation with the DNA.

Obviously the correct guidelines for human governance are about the health of people and the total environment. It is possible to use the knowledge we have about this to outline the nature of the supra-technology that Emmanuel Kant had alluded to during the Age of Enlightenment. This is important because our present position, at the brink of extinction, is precisely the very situation that ancient Greek science had warned about over 2000 years ago.

The ever-growing global arms race and aggressive, dehumanizing economic policies appear to be a logical outcome of the destructive science that is now controlling global human endeavor. It becomes now reasonable to see that a completely new technology can be developed that will open de Chardrin’s golden gate to the superhuman future for everyone, all together, otherwise the Classic Greek ethic promises would be unscientific and we now know for certain that they are not.

Because of the present acceleration of technology information overload, it is unfair and unreasonable to expect the great political leaders of the world to have time to consider any romantic scientific philosophy. Scientists must find a way to obtain instantaneous proof statements proving the existence of the new global human survival technology. Science-art thinking becomes the catalyst to obtain such proof statements and ensure that the great leaders of the world have the opportunity to consider them in time to avoid the complete destruction of civilization..

The ethical science of the ancient Greeks is about atomic movement producing wisdom through beauty. This describes a modern technological process that we are familiar with. It also provides the methodology to obtain the instantaneous human survival knowledge needed now for the great leaders to examine.

When a metallic alloy is sufficiently heated the electron movement about the metal atoms causes a glowing light to appear. When this light is passed through a glass prism, it produces a beautiful rainbow. A computer can read in the rainbow a wisdom identifying the

exact amount of each metal contained in the alloy. This process is an important aspect of modern technology.

During my Artist-in residence at the University of Sydney in 1986, the Centre's idea of inducing energy onto the surface of the human cell in order to read an aspect of its health wisdom was considered a very foolish idea. My photograph was included into a front page article in the Sydney Morning Herald about the uproar such ideas created on campus. Several years later one such '*foolish*' researcher made a world famous discovery and was made a head of the University's Medical Department for her ability to obtain early warning signs of cancer by using this idea.

The state of human health can be measured from energy patterns on the cellular surface. The energy pattern on the human cellular membrane contains evolutionary survival knowledge going back millions of years into time. We know how to extrapolate such wisdom to obtain the vital human survival simulations that simply cannot be obtained by using the prevailing logic upholding the 20th Century worldview.

The cellular membrane employs a fractal logic that has solved far greater environmental problems than the ones we are creating for ourselves now. Evolutionary direction is provided by the constantly changing shapes of the evolving protein, which when measured, demonstrate that it is moving towards universal infinity. This process and not the DNA controls evolution, however we cannot reason about it under the present scientific worldview, which deems any connection of the living process with universal infinity as impossible. The human survival technology is about obtaining computer simulations extending the cellular experience further into the survival direction taken up by the evolving protein.

Our ability to heal our wounds indicates that the protein is part of a self-repair mechanism, which explains that it is receiving holographic instructions. We can therefore look for and find the laser light needed for the hologram within the biophoton on the cellular surface. Our mathematics and physics discoveries tell us that forces emanating from a multi-dimensional universe maintain life and are trying to sustain life. The human survival technology must be about our evolving relationship with the holographic nature of the multidimensional universe. The amount of incredible wealth, resources and human opportunity seen to be available from such a technology is beyond any imagination dictated to by the prevailing law of ultimate universal heat death.

A glass prism filters technological wisdom from a heated alloy at the speed of light. Induced energy to a human cell provides an instant wisdom of health. A similar process can be envisaged to learn about the evolving wisdom obtained by the high speed evolving protein.

A fractal logic filter can be designed that will only allow human survival data to emerge from the chaos of information overload at the disposal of the protein. Scientists have extended de Chardin's work in order to obtain the mathematics necessary to decode this filtered human survival data into the human survival technology. The Earth regularly

deflects solar flare radiation from the sun, meeting the criteria to be called an act of total health consciousness. By extrapolating backwards with creative physics logic from the relevant solar system physics into the human condition, the health principles to decode the filtered survival data become apparent.

I will now talk about how Art can be used to help present the human survival technology in an appropriate form for consideration by the great leaders of the world.

In 1999 my Science-Art Research Centre of Australia published a paper entitled *THE ENGINEERING OF GLOBAL DEMOCRACY*, written by its engineer and prefaced by a former Professor of Life Sciences at NASA. The thrust of the paper was about using a fractal logic filter to obtain a human survival technology from information overload. A copy of this publication was sent to 100 famous engineers and scientists throughout the world. The replies to the Centre's publication revealed that enough scientists are working at the cutting edge of Creative Physics Science-Art research to implement the human survival technology. In particular, we were amazed that the chief scientist to Britain had been warning for several years that any country or government which did not realize how to use fractal logic to obtain new technology from information overload would become losers in the 21st Century. The world is far too dangerous a place for any country at all to become a 21st Century loser and it is necessary to modify the brilliant British ideas to obtain the global human survival technology.

It was pointed out that it had taken many years to persuade the Australian universities to even start work on the British idea. The expense of modifying this work from the destructive scientific world view includes a reeducation cost that would not be tolerated by any government or multinational company. However the late engineer and genius, Buckminster Fuller, in his human survival book, titled *UTOPIA OR OBLIVION*, foresaw such a situation. His solution was about using the catalytic properties of art.

In March–April 2000, the Centre, in collaboration with the Royal Queensland Art Society, and the Tweed Valley Council of Australia organized a Science-Art Festival. This included a public forum in which the people voted upon new symbols for the 21st Century. One of these was a form of Global Democracy based upon the new balanced science and technology, which embraces human values. The symbols were placed on the internet and overseas scientists recognized their importance.

A paper entitled, *FOR THE PEOPLE BY THE PEOPLE OF THE WORLD*, was published in Sydney linking the Centre's work with a paper from the Department of Political Science at the University of Hawaii. This paper was about the need for social engineers to obtain human survival wisdom from information overload and use physics beyond the present worldview to prevent the extinction of humanity. The June and July 2000 issues of the *American Nano Technology Magazine* reprinted the paper in a special two-part feature. Such occurrences as this helped the Centre to identify a worldwide group of scientists working at the cutting edge of Creative Physics research.

The difficulty of arranging for fifty scientists to write a scientific paper linking all their

work to the global human survival theme is enormous. National economic, security and religious policies as well as multinational corporate jealousies prohibit such a venture. However if each scientist was asked to submit such a paper to be portrayed in an art form for an international touring science-art exhibition, then all such problems would vanish immediately.

It would be very offensive to tell the American people that their Great American Dream had been constituted upon unbalanced physics and geometrical principles. As the Science-Art Research Centre has demonstrated, it is an act of appreciated friendship to state that in order to truly honour the Great American Dream it is necessary to update the physics and geometrical principles upon which it was constructed.

If art was produced to portray scientific ideas now emerging from outside the present scientific world view, then that would be quite literally the foundation stone for a new global renaissance. If it honours the Great American Dream then a vast new science and technology will morally become available to foreign countries in the name of global human survival. Recently there were front page headlines advising that the American Dream was ruined. However this dream is meant to be shared by all people throughout the world. If honouring the dream is expressed only in the new sustainable scientific and geometrical logic then past mistakes can fade away honourably. The most important outcome will be a scientific vision of a far greater and more benevolent reality. The presently predicted profits of multinationals fade into obscurity when compared with the innate wealth available from the human survival technology.

In 1988 the Science-Art Centre published a book which explained that that the American Democracy needed to be upgraded scientifically in order to honour the Great American Dream.

(show slide of a copy of the Riverland document reproduced in the Science-Art Centre's Book *TWO BOB'S WORTH*)

This document, signed by all of the Councils of the Riverland area in South Australia, the region's government appointed cultural trust and its state government parliamentary representative, endorses the cultural significance of that book. In 1989 the famous Hollywood Thalian Mental Health Organisation launched the book in Los Angeles and arranged for an accompanying art exhibition. Since then the Councils have amalgamated and re-endorsed the work of the Centre as a recognized Creative Physics contribution toward a global democracy.

(show slide of a reproduction of the Hollywood Thalian's 2000 award)

This document, signed in 2000, is a Gold Star Decree of Excellence from the Hollywood Thalian Society for contributions towards the betterment of the global human condition. This document is similar to one awarded to my artist colleague, Robert Todorai, who co-authored the Science-Art book that was launched in Hollywood in 1989.

There are American organisations that consider that the 2000 document signed by the

Riverland Councils is one of the important documents in the history of the Western democratic thought. It is interesting to note that Renmark is a Sister City of Friendship to Shi Shi in China. I was invited to deliver a talk at a federal government conference on regional economic development in November last year. At the Conference a ceremonial gift of a magnificent stone lion was presented to the city of Renmark by the city of Shi Shi.

It can be seen that the Science-Art Centre has the expertise to organise an international Science-Art exhibition. Several distinguished scientists have assessed the idea of the international touring Science-Art Exhibition to be a major world resource. Once the human survival papers portraying the work of the scientists working at the cutting edge of the human survival technology are centralized, computer scientists will understand what questions are needed in order to obtain computer simulated proof statements for the development of that human survival technology. The only country in the world that has scheduled for the relevant expensive nanotechnology experiments is the United States of America. It would therefore be necessary to have a strong and obvious moral reason for the Americans to allow foreign governments to participate in such work.

There is no doubt whatsoever about the great talents of Chinese artists and scientists. It would be important that they are represented in helping to bring about the new ethical science leading to the new great global renaissance.

In conclusion, we all know that we cannot continue in the violent and destructive direction that the prevailing unbalanced scientific world view is taking us. It is time for all of us to work together to turn this direction around, to realise a real hope that will ensure a great future for all of us and our children .

I thank you all for being here to listen to my talk.

ADDENDUM

The SCIENCE-ART AND GLOBAL HUMAN SURVIVAL TECHNOLOGY paper was written to be delivered at Yangzhou University and Nanjing University during October and November, 2001. It was a sequel to my talk of the same title delivered at Cambridge University on the 8th of June, 2001.

As a result of the Cambridge University lecture a member of the House of Lords, Lord Gordon Prestoungrange, instigated an in-depth academic investigation of my Science-Art Research Centre of Australia's work. Consequently I was awarded a Visiting Professor title to the Action Learning University in the USA and to their Market Management Centres.

On October 30th, 2001, the TIMES WEEKEND MAGAZINE published the final installment of their A-Z Dictionary of Space, "compiled by some of the world's finest cosmologists". Included into this lexicon was the model of an Open Universe. In 1979 the ABC National Television included my concept of an Open Universe into their eight part

television series, THE SCIENTISTS – PROFILES OF DISCOVERY.

With the scientific acceptance of Open Universe theory, it becomes immoral for Western universities to continue to prohibit the use of the scientific method of enquiry for enhancing human values. This dictatorial procedure is being imposed by prescribed scientific text books which insist upon obedience to the old worldview dictum of the 2nd Law of Thermodynamics.

Cambridge scientists associated with the compilation of the Dictionary of Space were traumatised by this argument and helped me to draft a letter to the Minister for Education in Australia, the Hon Dr David Kemp. The reply explained that the Australian Government has no educational policy on this issue. When confronted with such evidence, students at Nanjing University were anxious to help the West resolve this serious problem. Yangzhou University awarded me a Visiting Professorial title and requested the implementation of a China-Australia university course. Discussions to establish such a China-Australia-America friendship course were conducted by the Science-Art Research Centre of Australia during January and February, 2002.

Upon my return to Australia in December, 2001, I conducted an internet search to locate the existence of physics and chemistry research at the cutting edge of Creative Physics development. As a result of this the Institute for Basic Research in the USA offered me the titles of a Professor of Science and Professor of Art. Their work to obtain new clean fuels to replace fossil fuels was derived from their Hadronic Chemistry. This work was related to the healthy life supporting logic associated with a more general geometrical description of the universe, referred to in this address.

It is extremely important that the Australian Government becomes aware of the seriousness of the new China-Australia friendship initiative. The Chinese Government is now becoming aware of the prevailing contradiction to global world peace that is innate within the 20th Century worldview. It would be devastating if Australia ignores this matter. To continue to provide offensive education to Chinese and other international students in Australian universities without demonstrating a capacity to reason about the enhancement of human values within an open universal model of reality needs to be corrected at once.

The Australian multicultural ethos and the democratic sharing of knowledge is appreciated throughout the world. The opportunity to upgrade and supplement this existing ethos now becomes a governmental top priority concept. On Australia Day, 2002, artists and thinkers at Murwillumbah and Byron Bay celebrated this vision of global world peace following the 'TIMES' validation of the new concept of democracy, based upon a balanced science, voted into existence during the Tweed Valley Science-Art Festival, 2000. This was subsequently recorded by *THE DAILY NEWS, THE TWEED TIMES AND THE BYRON BAY ECHO*

Australia can now help lead the world into a new era of benign global human existence.